

## Water purification technology

### *Application of CSIR/NCL's polymer research in the interest of society and rural India*

In the late 1990s, the National Chemical Laboratory of the CSIR has developed a polymer to produce an ultra-filtration membrane. This membrane with minimal hydrostatic pressure can filter out any surface water and can make it free of any microbiological and viral contamination. This was extensively tested at various laboratories including the prestigious National Institute of Virology.

M/s Membrane Filters (I) Pvt Ltd has licensed this membrane technology from CSIR and developed various types of safe drinking water filters for households and institutions. The company has deployed over 150 units for the Department of Science & Technology, Government of India, in various remotest parts of rural India. This was further scaled up in states such as Arunachal Pradesh and Nagaland, where over 500 systems were deployed and have been working for the past three years without any maintenance issues whatsoever. In all, Membrane Filters has over 25,000 water filtration systems deployed in various parts of the country across schools, government offices, hospitals, households, non-profit institutions and corporate organizations.

Membrane Filters owns a state-of-the-art membrane manufacturing and water filtration system assembly unit in Kelawade village, on the outskirts of Pune. The company's corporate headquarters are in Pune city. The company has been introducing innovative products that can help the company scale-up rapidly and some of those are depicted below.



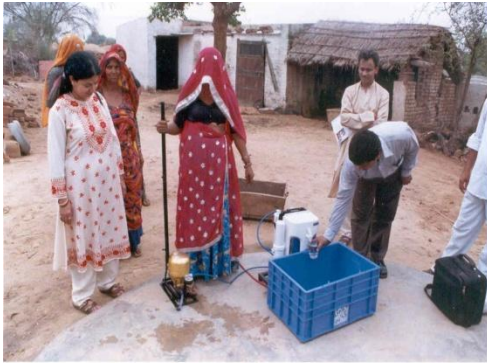
***Madhu Tara* that works on hand pump and also with electricity (100 LPH)**



***Jal Doot* a mobile water filtration system that goes house to house for delivering water in villages**



**Purioin XL that works on gravity in operation theater (300 LPH)**



**Purioin XL for villagers that delivers 200 LPH with hand pump**



**Jal Dhara (5000 LPH /50 KLD) together with iron arsenic /fluoride removal system installed in remote areas of Jharkhand & Bihar**



**Prerana systems and other such designs installed in schools in more than 6 states in India**



**Current manufacturing of large systems with above 10000LPH state-of-the-art manufacturing facility**

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